

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method of determining the ~~cardiac output~~ diameter of the pulmonary valve of a patient, the method comprising the steps step of:

- (a) ~~measuring the patient's height;~~
- (b) ~~measuring the velocity time integral or stroke distance of blood flowing from the heart of the patient;~~
- (c) calculating, ~~an estimate for the cross sectional area of the heart valve based on using a single variable formula[[]],~~ the diameter of the pulmonary valve of the patient wherein the single variable is the patient's height; and
- (d) ~~calculating a value for the cardiac output of the patient as a product of the measured velocity time integral and the estimated cross sectional area of the heart valve.~~

2. (Currently Amended) A method as claimed in claim 11 further comprising the step of measuring the correlation between ~~an individual's~~ the patient's height and of the diameter of the pulmonary ~~cross sectional area of a cardiac valve~~ for a population of individuals.

3. (Previously Presented) A method as claimed in claim 2 wherein said population is selected having similar body characteristics to said patient.

4. (Currently Amended) A method as claimed in claim 1 wherein said method is utilised to determine the cardiac output from ~~either the aortic annular or the pulmonary annular~~.

5-6. (Canceled)

7. (Currently Amended) A method as claimed in claim 1 wherein ~~calculating a value for the cardiac output includes utilising a formula substantially of the form~~ the single variable formula is:

$$\text{pulmonary annular diameter} = 0.0106 \times \text{height (cms)} + 0.265\text{cm}$$

~~to determine the diameter of the pulmonary valve and then determine a cross sectional area.~~

8. (Canceled)

9. (Currently Amended) A method of determining the cardiac output of a patient, the method comprising the steps of:

- (a) measuring the patient's height;
- (b) estimating for the heart of the patient the heart valve diameter and cross sectional area of the heart valve based on the patient's height;
- (c) measuring the velocity time integral or stroke distance of blood flowing from the heart of the patient; and
- (d) calculating a value for the cardiac output of the patient using the ~~as a product of the~~ velocity time integral and the cross sectional area of the heart valve utilising a formula substantially of the form: ~~aortic annular diameter = 0.010 x height (cms) + 0.25cm~~
pulmonary annular diameter = 0.0106 x height (cms) + 0.265cm to determine the diameter of the ~~aortic annular~~ pulmonary annular and then determine ~~[[a]]~~ the cross sectional area.

10. (Canceled)

11. (Currently Amended) A method as claimed in claim 1, wherein the single variable formula is linear and is responsive to correlation data for the diameter of the pulmonary ~~estimating cross sectional area of the heart valve of the patient based on the patient's height; the correlation data~~

being indicative of correlation between ~~an individual's~~ the patient's height and the diameter of the aortic cross-sectional area of a cardiac valve for a population of individuals.

12. (New) An apparatus for measuring the diameter of the pulmonary valve of a patient, the apparatus including;

an interface for inputting the patient's height;

a processor for calculating the diameter of the pulmonary valve of the patient using a single variable formula, wherein the single variable is the patient's height, and

an output for outputting the calculated diameter of the pulmonary valve of the patient.

13. (New) An apparatus according to claim 12 wherein the output is interconnected to an input of cardio-vascular equipment.

14. (New) The method of claim 9, wherein calculating a value for the cardiac output of the patient further comprises using a heart rate of the patient.